



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/596,147	04/10/2007	Matthias Wendt	PHDE030406US	2794
38107	7590	05/29/2008		
PHILIPS INTELLECTUAL PROPERTY & STANDARDS 595 MINER ROAD CLEVELAND, OH 44143			EXAMINER VARGAS, DIXOMARA	
			ART UNIT	PAPER NUMBER
			2831	
			MAIL DATE	DELIVERY MODE
			05/29/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,147	Applicant(s) WENDT ET AL.	
	Examiner DIXOMARA VARGAS	Art Unit 2831	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-10 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/01/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Europe on 12/08/03. A claim for priority under 35 U.S.C. 119(a)-(d) cannot be based on said application, since the United States application was filed more than twelve months thereafter.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 06/01/06 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Specification

3. The disclosure is objected to because of the following informalities: The Specification should not make reference to the claims.

Appropriate correction is required.

4. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase “Not Applicable” should follow the section heading:

(a) TITLE OF THE INVENTION.

(b) CROSS-REFERENCE TO RELATED APPLICATIONS.

(c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT.

(d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.

(e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A
COMPACT DISC.

(f) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97
and 1.98.

(g) BRIEF SUMMARY OF THE INVENTION.

(h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(i) DETAILED DESCRIPTION OF THE INVENTION.

(j) CLAIM OR CLAIMS (commencing on a separate sheet).

(k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(I) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A “Sequence Listing” is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required “Sequence Listing” is not submitted as an electronic document on compact disc).

Claim Objections

5. Claims 1-10 are objected to because of the following informalities: the transitional phrase between the heading and the body of the claim is not in compliance with the regular US practice, for example, comprising, including, consisting of, etc.. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1-3 and 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan (US 6,850,064 B1) in view of Jones et al. (US 5,666, 055 A).

With respect to claim 1, Srinivasan discloses a circuit arrangement for an MR apparatus (as seen on Figure 9), having a resonant circuit which is formed by an MR receiving coil (coils #1-#3) and a capacitor (as seen on Figure 6a, C1-C3), and having an electronic control circuit (computer control not numbered as seen on Figure 9) for switching the resonant circuit between two or more operating modes (Column 9, lines 6-25), wherein the electronic control circuit is connected to a receiving device for reception of a high-frequency electromagnetic control signal (as seen on Figure 9).

Furthermore, Srinivasan discloses the claimed invention as stated above except for specifying that the receiving device have the capability of wireless reception of control signal. However, Jones discloses the device having the capability of wireless reception of control signal (Column 5, lines 37-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use Jones's device having the capability of wireless reception of control signal with Srinivasan's circuit for the purpose of simplifying the structure since it requires no additional hardware modification in order to operate the MRI system and activate the desire coils of the system as taught by Jones (Column 4, lines 41-51).

9. With respect to claim 2, Srinivasan discloses the receiving device is formed by the MR receiving coil itself (coils #1-#3 as seen on Figure 9), and wherein switching over of the resonant circuit (Column 9, lines 6-25) is controllable by means of the control circuit in dependence on

Art Unit: 2831

the amplitude of the high-frequency signal present at the MR receiving coil (Column 7, lines 5-16).

10. With respect to claim 3, Srinivasan discloses the receiving device is formed by an additional resonant circuit which is tuned to a different resonant frequency from the resonant circuit formed by the MR receiving coil and the associated capacitor (Columns 9-10, lines 64-67 and 1-14 respectively).

11. With respect to claim 6, Srinivasan discloses the receiving device is constructed for receiving radio signals of a radio control (Column 9, lines 44-63).

12. With respect to claim 7, Srinivasan discloses an MR apparatus (as seen on Figure 9) having a main field coil for generating a substantially homogeneous, static magnetic field in an examination volume (main magnet not numbered and as labeled in Figure 9), a transmitting coil for generating high-frequency fields in the examination volume (body coil not numbered and as labeled in Figure 9), an MR receiving coil for receiving MR apparatus signals from the examination volume (coils #1-#3), a computer unit for controlling the MR apparatus (computer control not numbered and as labeled in Figure 9).

13. With respect to claim 8, Srinivasan discloses an MR method for generating an image of an examination object using an MR apparatus as claimed in claim 7, wherein the image is reconstructed from MR signals that are received from the examination volume after input of a high-frequency pulse (Column 9, lines 44-63), and wherein the resonant circuit formed by the MR receiving coil and the associated capacitor is switched by additional generation of a high-frequency electromagnetic control signal between an activated and a de-activated operating

Art Unit: 2831

mode, such that the resonant circuit is in the de-activated operating mode during input of the high-frequency pulse (Column 9, lines 6-25).

14. With respect to claim 9, Srinivasan discloses the control signal has a different frequency from the high-frequency pulse and wherein the control signal is generated before or after the high-frequency pulse (Columns 9-10, lines 64-67 and 1-14 respectively).

15. With respect to claim 10, Srinivasan discloses a computer program for an MR apparatus as claimed in claim 7, wherein an MR method is implemented by the computer program on the computer unit of the MR apparatus (see computer in Figure 9).

Allowable Subject Matter

16. Claims 4-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter:

a. With respect to claim 4, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a circuit arrangement for an MR apparatus, having an additional resonant circuit connected to a rectifier circuit for generating a low-frequency switching signal in combination with the remaining limitations of claims 1 and 3 above.

b. With respect to claim 5, the claim has been found allowable over the prior art of record because the prior art of record fails to teach or fairly suggest a circuit arrangement

Art Unit: 2831

for an MR apparatus, having a the control circuit comprising a time-delay circuit that is constructed such that the resonant circuit formed by the MR receiving coil and the associated capacitor, upon receipt of the control signal, is switched over into an activated or de-activated operating mode, and thereafter remains in that operating mode for a time interval of pre-determinable duration in combination with the remaining limitations of claim 1 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIXOMARA VARGAS whose telephone number is (571)272-2252. The examiner can normally be reached on Monday to Thursday from 8:00 am. to 4:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dixomara Vargas/
Patent Examiner,
Art Unit 2831